

REMARKS

The following remarks are responsive to the Office Action mailed 8 January 2007. Applicants respectfully request reconsideration of this application as amended.

Office Action Summary

Claims 37-51 have been rejected under 35 USC §101 as being directed to non-statutory subject matter.

Claims 1-58 have been rejected under 35 USC § 112, first paragraph, as failing to comply with the enablement requirement.

Claims 1-3, 6-15, 18-20, 26-30, 32-45, 48-49, 51-55, and 57-58 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,366,582 of Nishikado et al. ("Nishikado").

Claims 16, 31, 46, 50 and 56 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Nishikado in view of U.S. Patent No. 6,275,493 of Morris et al. ("Morris").

Status of Claims

Claims 1-58 are pending in the application. In the present response, claims 37-51 have been amended as to form and to more properly recite existing limitations. No claims have been added or canceled.

Examiner Interview Summary

At the request of applicants' representative, Richard Thill (Reg. No. 53,686), the Examiner granted a telephone interview on October 30, 2007 to

discuss the Office Action mailed on August 2, 2007. Applicants' representative Richard Thill presented oral arguments regarding claims rejections under 35 USC § 101 and 35 USC § 112, first paragraph. No agreement was reached.

Applicants also noted that the rejections under 35 USC § 102 and § 103 in the present Office Action do not consider, and are not responsive to, applicants' amendments in the Office Action Response filed May 8, 2007. The Examiner stated that the amendments had been entered, but had not been considered or examined in view of the rejection of the claims under 35 USC § 112, first paragraph.

The Examiner requested that formal arguments be submitted with respect to all of the claim rejections.

Claim Rejections Under 35 USC §101

Claims 37-51 have been rejected under 35 USC §101 as being directed to non-statutory subject matter. As amended for form, each of claims 37-51 recites, either directly or through dependency:

A computer-readable storage medium having instructions stored therein, which when executed by a computer, cause said computer to perform operations comprising . . .

followed by a recitation of operations that perform functions such as "sending," receiving," "preparing," deleting," etc.

Citing to page 51 of the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility ("the Guidelines"), the Office Action states:

When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement.

(8/2/07 Office Action, p. 2. lines 1-3) (emphasis added)

That is, the Office Action characterizes **instructions stored in a computer-readable storage medium that cause a computer to perform operations** as nonfunctional descriptive material, and applies the Guidelines for nonfunctional descriptive material to claims 37-51. Applicants submit that the cited passage from the Guidelines is inapplicable to claims 37-51, at least because the "instructions" recited in claims 37-51 are functional descriptive material as defined in the Guidelines, the MPEP and the relevant case law.

Both the Guidelines (page 50, lines 1-15) and the MPEP state:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, **"functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. . . .** "Nonfunctional descriptive material" includes but is not limited to music, literary works, and a compilation or mere arrangement of data. 33 F.3d at 1360, 31 USPQ2d at 1759.

When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

(MPEP 2106.01) (emphasis added).

Applicants submit that **instructions stored in a computer-readable medium that cause a computer to perform operations** is functional

descriptive material at least because such instructions are computer programs that impart functionality (e.g., cause a computer to perform operations) when employed as a computer component, as defined in the guidelines and the MPEP.

Moreover, applicants submit that claims 37-51 cannot be rejected as reading on an electromagnetic carrier signal because that exclusion applies only to nonfunctional descriptive material and applicants have demonstrated in the foregoing argument that claims 37-51 recite functional descriptive material.

In view of the foregoing arguments, applicants respectfully request that the rejection of claims 37-51 under 35 USC §101 be withdrawn.

Claim Rejections Under 35 USC §112

Claims 1-58 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. The Office Action states that “a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers” is not disclosed in the original specification (8/2/07 Office Action, p. 3).

Applicants would respectfully point out that “[t]he subject matter of the claims need not be described literally (i.e., using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement.” (MPEP § 2163.02).

Applicants direct the Examiner’s attention to Figures 5 and 7 and the accompanying disclosure on pages 17-21 of the original specification. In

particular, Figure 5 illustrates a bulk release message 510 comprising a series of connection clearing transactions 520 (w, x, y and z). Each of transactions w through z include a list 515 of connections to be cleared that are referenced in blocks 744 through 752 of Figure 7. The list of connections associated with transaction w would be recognized by one of ordinary skill in the art as a list of consecutive connection identifiers a, b, c and d. The list of connections associated with transaction z would be recognized by one of ordinary skill in the art as a list of non-consecutive connection identifiers p, q, s, v and w (where, connections t and u are omitted). Applicants submit that in view of the above referenced Figures and associated disclosure, a person having ordinary skill in the relevant art would discern the meanings of the terms in the amended claims. A claim is that is not used or defined in the specification is not indefinite if the meaning of the claim term is discernible. Bancorp. Services, L.L.C. v. Hartford Life Ins. Co., 359 F.3d 1367, 1372 (Fed. Cir. 2004). Moreover, applicants submit that the enablement requirement is satisfied because one having ordinary skill in the relevant art would understand how to make and use the claimed invention without undue experimentation, based on the disclosure and the readily discernible claim terms in view of the disclosure. In re Wright, 999 F.2d 1557, 1562 (Fed. Cir. 1993).

Claim Rejections Under 35 USC §102

Claims 1-3, 6-15, 18-20, 26-30, 32-45, 48-49, 51-55, and 57-58 have been rejected under 35 U.S.C. §102(e) as being anticipated by Nishikado. As

noted above, the Office Action has rejected claims 1-3, 6-15, 18-20, 26-30, 32-45, 48-49, 51-55, and 57-58 without considering applicants' amendments submitted in an Office Action Response filed on May 8, 2007. The Examiner has stated that the amendments were entered but not considered in view of the pending rejection of claims 1-58 under 35 USC § 112, first paragraph, for lack of enablement. Applicants respectfully submit that, having entered the amendments, the Examiner was obligated to examine the amended claims on the merits in the present Office Action, irrespective of the § 112 rejection. Nevertheless, applicants here present pending claims 1-3, 6-15, 18-20, 26-30, 32-45, 48-49, 51-55, and 57-58 and repeat the previous arguments for patentability in view of the current grounds for rejection.

Claims 1-3

Claim 1 recites:

A method comprising:

clearing a plurality of first connections in bulk between a first node and a second node of an ATM network from the first node; and

for each said clearing, sending a first message from the first node to the second node, the first message comprising a single bulk release message from the first node to the second node containing an identification of the first connections, the identification comprising **a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers.**

(emphasis added).

Nishikado discloses a communication network including connection switching exchanges in which logical connections and connection identifiers are set up and released (Nishikado, Abstract). In particular, Nishikado discloses:

[A] connection switching exchange wherein, through the use of a value masked by a switching mask register as a unit, a group of logical **connection identifiers having consecutive connection identifiers** in the unit can be subjected to connection switching by using only one entry of a switching table.

(Nishikado, col. 19, lines 13-18)

That is, the apparatus and method of Nishikado is constrained by its design to switch (i.e., set up and release) consecutive connection identifiers and **only** consecutive connection identifiers. Nishikado does not disclose “a list of connection identifiers allowing both of consecutive connection identifiers and **non-consecutive** connection identifiers,” as recited in claim 1.

Given that claims 2 and 3 depend from claim 1 either directly or indirectly, and include all of the limitations of claim 1, applicants submit that claims 2 and 3 are also not anticipated by Nishikado.

Claims 6-8

Claim 6 recites:

A method comprising:

receiving a first message comprising a single bulk release message by a first node of an ATM network from a second node of the ATM network connected to the first node by at least one first connections, wherein the single bulk release message comprises **a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers**;

clearing the first connections from the second node in bulk in response to receiving the first message; and

sending a second message from the first node to the second node, the second message identifying at least one of the first connections cleared from the second node and the first message.

(emphasis added).

As noted above, Nishikado discloses only the release of consecutive connection identifiers. Nishikado does not disclose that a “bulk release message comprises a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers,” as recited in claim 6. Accordingly, applicants submit that claim 6, as amended, is not anticipated by Nishikado.

Given that claims 7 and 8 depend from claim 6 either directly or indirectly, and include all of the limitations of claim 6, applicants submit that claims 7 and 8 are also not anticipated by Nishikado.

Claims 9-15, 18-20 and 26

Claim 9 recites:

A method of clearing a plural number of connections between a first node and a second node in an Asynchronous Transfer Mode network including:

 sending at least one first message comprising a **single bulk release message** from the first node to the second node, wherein each first message **comprises a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers**, each first message including an identification of at least one of
 each of a plural number of first connections to be cleared in bulk from the second node by the first message, and
 each of a plural number of first connections that is one of cleared from the first node and to be cleared from the first node.

(emphasis added).

As noted above, Nishikado discloses only the release of consecutive connection identifiers. Nishikado does not disclose that “a single bulk release message . . . comprises a list of connection identifiers allowing both of

consecutive connection identifiers and non-consecutive connection identifiers,” as recited in claim 9. Accordingly, applicants submit that claim 9, as amended, is not anticipated by Nishikado.

Given that claims 10-15, 18-20 and 26 depend from claim 9, either directly or indirectly, and include all of the limitations of claim 9, applicants submit that claims 10-15, 18-20 and 26 are also not anticipated by Nishikado.

Claims 27-30, 32 and 33

Claim 27 recites:

An Asynchronous Transfer Mode (ATM) node that includes
a first circuit that generates an inter-nodal call control first message comprising a single bulk release message containing an identification of at least one of each of a plural number of first connections to be cleared in bulk at an ATM first node to be coupled to the ATM node, and each of a plural number of first connections that is one of cleared from the ATM node and to be cleared from the ATM node, wherein the **single bulk release message comprises a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers**; and
a second circuit to transmit the first message to the first node.

(emphasis added).

As noted above, Nishikado discloses only the release of consecutive connection identifiers. Nishikado does not disclose that a “single bulk release message comprises a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers,” as recited in claim 27. Accordingly, applicants submit that claim 27, as amended, is not anticipated by Nishikado.

Given that claims 28-30, 32 and 33 depend from claim 27 either directly or indirectly, and include all of the limitations of claim 27, applicants submit that claims 28-30, 32 and 33 are also not anticipated by Nishikado.

Claims 34-36

Claim 34 recites:

An Asynchronous Transfer Mode (ATM) node that includes
a first circuit to receive and interpret a first message
comprising **a single bulk release message** from a first ATM
node that contains an identification of a plural number of first
connections, wherein the first message **comprises a list of
connection identifiers allowing both of consecutive
connection identifiers and non-consecutive connection
identifiers**; and
a second circuit to clear the first connections in bulk from
the ATM node.

(emphasis added).

As noted above, Nishikado discloses only the release of consecutive connection identifiers. Nishikado does not disclose that “a single bulk release message . . . comprises a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers,” as recited in claim 34. Accordingly, applicants submit that claim 34, as amended, is not anticipated by Nishikado.

Given that claims 35 and 36 depend from claim 34 either directly or indirectly, and include all of the limitations of claim 34, applicants submit that claims 35 and 36 are also not anticipated by Nishikado.

Claims 37-39

As amended, claim 37 recites:

A computer-readable storage medium having instructions stored therein, which when executed by a computer, cause said computer to perform operations comprising receiving an inter-nodal message transmitted from a first Asynchronous Transfer Mode (ATM) node to a second ATM node, the inter-nodal message comprising a single bulk release message from the second ATM node that includes a list of identified connections to clear from the first ATM node, wherein **the list of identified connections allows both of consecutive connections and non-consecutive connections to be identified.**

(emphasis added).

As noted above, Nishikado discloses only the release of consecutive connection identifiers. Nishikado does not disclose that a “list of identified connections allows both of consecutive connections and non-consecutive connections to be identified,” as recited in claim 37. Accordingly, applicants submit that claim 37, as amended, is not anticipated by Nishikado.

Given that claims 38 and 39 depend from claim 37, either directly or indirectly, and include all of the limitations of claim 37, applicants submit that claims 38 and 39 are also not anticipated by Nishikado.

Claims 40-43

As amended, claim 40 recites:

A computer-readable storage medium having instructions stored therein, which when executed by a computer, cause said computer to perform operations comprising:
transmitting an inter-nodal first message comprising a single bulk release message by an Asynchronous Transfer Mode (ATM) first node to an ATM second node in response to a reception by the first node of an inter-nodal second message from

the second node identifying a plural number of connections to clear from the first node that includes a list of connection identifiers of the plural number of connections, **the list allowing both of consecutive connection identifiers and non-consecutive connection identifiers.**

(emphasis added).

As noted above, Nishikado discloses only the release of consecutive connection identifiers. Nishikado does not disclose "a list of connection identifiers of the plural number of connections, the list allowing both of consecutive connection identifiers and non-consecutive connection identifiers," as recited in claim 40. Accordingly, applicants submit that claim 40, as amended, is not anticipated by Nishikado.

Given that claims 41-43 depend from claim 40 either directly or indirectly, and include all of the limitations of claim 40, applicants submit that claims 41-43 are also not anticipated by Nishikado.

Claims 44, 45, 48, 49 and 51

As amended, claim 44 recites:

A computer-readable storage medium having instructions stored therein, which when executed by a computer, cause said computer to perform operations comprising:

preparing at least one first message comprising a single bulk release message to be sent from a first node of an ATM network to a second node of an ATM network, each first message including an identification of a first connections to be cleared in bulk from the second node by the first message, the identification comprising **a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers.**

(emphasis added).

As noted above, Nishikado discloses only the release of consecutive connection identifiers. Nishikado does not disclose an “identification comprising a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers,” as recited in claim 44. Accordingly, applicants submit that claim 44, as amended, is not anticipated by Nishikado.

Given that claims 45, 48, 49 and 51 depend from claim 44 either directly or indirectly, and include all of the limitations of claim 44, applicants submit that claims 45, 48, 49 and 51 are also not anticipated by Nishikado.

Claims 52-55, 57 and 58

Claim 52 recites:

An Asynchronous Transfer Mode (ATM) node that includes
means for generating an inter-nodal call control first message type comprising a single bulk release message that is to identify at least one of each of a plural number of first connections to be cleared in bulk at an ATM first node coupled to the ATM node, and each of a plural number of first connections that is one of cleared from the ATM node and to be cleared from the ATM node, wherein **the single bulk release message comprises a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers**; and
means for transmitting the first message to the first node.

(emphasis added).

As noted above, Nishikado discloses only the release of consecutive connection identifiers. Nishikado does not disclose that a “single bulk release message comprises a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers,” as recited in

claim 52. Accordingly, applicants submit that claim 52, as amended, is not anticipated by Nishikado.

Given that claims 53-55, 57 and 58 depend from claim 52 either directly or indirectly, and include all of the limitations of claim 52, applicants submit that claims 53-55, 57 and 58 are also not anticipated by Nishikado.

Claim Rejections Under 35 USC §103(a)

Claims 16, 31, 46, 50 and 56 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Nishikado in view of Morris. Applicants submit that each of claims 16, 31, 46, 50 and 56 are patentable over the cited references because Nishikado and Morris, either alone or in combination, do not teach or suggest each and every limitation in the subject claims.

Claim 16

Claim 16 depends indirectly from independent claim 9 and includes all of the limitations of claim 9. As noted above, Nishikado does not teach or suggest that “a single bulk release message . . . comprises a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers,” as recited in claim 9.

Morris is directed to network control at ingress and egress points (gateways) of an ATM network. Morris discloses a switched virtual circuit (SVC) control agent which is responsible for call setup and release at ingress/egress points external to the ATM network, in response to requests from external communication applications at other ingress/egress points external to the

network. (Morris, col. 3, lines 19-21; col. 6, lines 5-9; Figs. 2, 3). Morris does not teach or suggest the transmission of bulk release messages from node to node within the network or any inner workings of the network at all.

Therefore, Morris does not teach or suggest the limitation "a single bulk release message . . . comprises a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers," as recited in claim 9." Applicants submit, therefore, that Nishikado and Morris, either alone or in combination, do not teach or suggest the subject limitation and that claim 16 is, therefore, patentable over the cited references.

Claim 31

Claim 31 depends indirectly from claim 27 and includes all of the limitations of claim 27. As noted above, Nishikado does not teach or suggest the limitation "a single bulk release message comprises a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers," as recited in amended claim 27.

As noted above, Morris does not teach or suggest the transmission of bulk release messages from node to node within the network or any inner workings of the network at all. Therefore, Morris does not teach or suggest the limitation "a single bulk release message comprises a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers," as recited in amended claim 27.

Applicants submit, therefore, that Nishikado and Morris, either alone or in combination, do not teach or suggest the subject limitation and that claim 31 is, therefore, patentable over the cited references.

Claims 46 and 50

Claims 46 and 50 depend indirectly from claim 44 and include all of the limitations of claim 44. As noted above, Nishikado does not teach or suggest an “identification comprising a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers,” as recited in claim 44.

As noted above, Morris does not teach or suggest the transmission of bulk release messages from node to node within the network or any inner workings of the network at all. Therefore, Morris does not teach or suggest an “identification comprising a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers,” as recited in claim 44.

Applicants submit, therefore, that Nishikado and Morris, either alone or in combination, do not teach or suggest the subject limitation and that claims 46 and 50 are, therefore, patentable over the cited references.

Claim 56

Claim 56 depends indirectly from claim 52 and includes all of the limitations of claim 52. As noted above, Nishikado does not teach or suggest that a “single bulk release message comprises a list of connection identifiers

allowing both of consecutive connection identifiers and non-consecutive connection identifiers,” as recited in claim 52.

As noted above, Morris does not teach or suggest the transmission of bulk release messages from node to node within the network or any inner workings of the network at all. Therefore, Morris does not teach or suggest that a “single bulk release message comprises a list of connection identifiers allowing both of consecutive connection identifiers and non-consecutive connection identifiers,” as recited in claim 52.

Applicants submit, therefore, that Nishikado and Morris, either alone or in combination, does not teach or suggest the subject limitation and that claim 56 is, therefore, patentable over the cited references.

Other Pending Claims

In the preceding Office Action (mailed 1/8/07) claims 4-5, 17, 21-25, and 47 were objected to as depending from rejected base claims. In the present Office Action, claims 4-5, 17, 21-25, and 47 were rejected under 35 USC §112, first paragraph. Applicants anticipate that, in view of the arguments provided herein, the § 112 rejection will be withdrawn and the previous objections to claims 4-5, 17, 21-25, and 47 will be repeated in a subsequent Office Action.

In the interest of expediting prosecution of the pending application, applicants repeat their prior arguments with respect to the objections to claims 4-5, 17, 21-25, and 47.

Claims 4-5, 17, 21-25, and 47 were objected to as being dependent upon rejected base claims. Claims 4 and 5 depend from claim 1, claims 17 and 21-25 depend from claim 9 and claim 47 depends from claim 44. Applicants submit that the objections to claims 4-5, 17, 21-25, and 47 are moot in view of the arguments herein which have overcome the rejections of claims 1, 9 and 44.

Conclusion

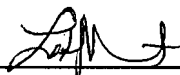
In conclusion, applicants respectfully submit that in view of the arguments and amendments set forth herein, the applicable objections and rejections have been overcome. Applicants reserve all rights with respect to the doctrine of equivalents.

If there are any additional charges, please charge our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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